

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

HEADWATER RESEARCH LLC,

*Plaintiff,*

v.

SAMSUNG ELECTRONICS CO., LTD. and  
SAMSUNG ELECTRONICS AMERICA, INC.

*Defendants.*

Case No. 2:23-CV-00103-JRG-RSP

**DEFENDANTS' REPLY IN SUPPORT OF ITS MOTION TO DISMISS**  
**FOR FAILURE TO STATE A CLAIM**

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## I. INTRODUCTION

When evaluating whether a complaint plausibly alleges infringement, “it is the *quality* of the allegations, not the *quantity*, that matters.” *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1354 (Fed. Cir. 2021) (emphasis added). Despite reproducing pages of screenshots, Headwater’s First Amended Complaint (“FAC”) fails to adequately specify how it contends Samsung infringes.

With respect to the ’117 patent, Headwater’s opposition alleges that Google’s Firebase messaging server constitutes the claimed “network message server.” As an initial matter, the FAC included no such allegation and, instead, identified only “**Samsung** push messaging servers,” not **Google’s** Firebase messaging server. In any event, Headwater’s belated accusation fails, as Headwater does not allege how Samsung could be liable for a third party’s servers.

Headwater’s FAC completely ignores several other claim limitations. *See* Dkt. 40. Headwater argues that it “does not have to plead infringement on an element-by-element basis.” Dkt. 42 at 3. But, a complaint must identify “what activity . . . is being accused of infringement.” *Bot M8*, 4 F.4th at 1353. Headwater’s FAC omits factual allegations for several limitations and thus fails to provide the notice required. *Id.* at 1354-55 (affirming dismissal of two patents).<sup>1</sup>

## II. HEADWATER FAILED TO ADEQUATELY PLEAD INFRINGEMENT OF THE ’117 PATENT.

### A. Headwater’s New Allegation Against Google’s Firebase Messaging Servers

Headwater failed to sufficiently plead infringement by the FCM functionality. The claims of the ’117 Patent recite a “network system” that comprises two principal components: “device messaging agents” on one end and a “network message server” on the other. For example, claim

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<sup>1</sup> Headwater’s other cases are distinguishable. *Disc Disease Sols. Inc. v. VGH Sols., Inc.*, 888 F.3d 1256 at 888 (Fed. Cir. 2018) “involve[d] a simple technology” for which photographs were found to give fair notice of infringement. In *Blitzsafe Texas, LLC v. Volkswagen Grp. of Am., Inc.*, No. 215-CV-1274-JRG-RSP, 2016 WL 4778699 at \*4 (E.D. Tex. Aug. 19, 2016), the challenged limitations were generic components, the presence of which could be inferred.

1 covers communication of things such as “Internet data messages” between a “device messaging agent” and a “network message server.” Critically, although Headwater’s FAC maps a “device messaging agent” to the “FCM client app,” it *does not plead any alleged “network message server”* that communicates with the allegedly infringing FCM client app. As a result, with regards to the FCM allegations, no plausible allegations about the identity of the “network message server” or how it performs any of the recited functions can be taken from the complaint.

Headwater now argues that, as the claimed “network message server,” the FAC identified “Samsung push messaging servers,” which “include Firebase messaging servers.” Dkt. 42 at 9-10. This argument contradicts Headwater’s admission with regards to other claims that Firebase messaging servers are Google’s servers, not Samsung’s. Dkt. 31-6 at 17 (alleging that messages are “routed through Samsung’s Tizen and Knox servers and **Google’s** Firebase messaging servers.”). Thus, Headwater’s identification of “Samsung push messaging servers” did not include and could not have included Google’s servers.

In any event, Headwater’s reliance on third party Google servers undermines its ability to pursue infringement. Vicarious liability requires one party to “control[] or direct[]” the actions of another. *See Centillion Data Sys., LLC v. Qwest Commc'ns Int'l, Inc.*, 631 F.3d 1279, 1287 (Fed. Cir. 2011); *Chapterhouse*, 2018 WL 6981828, at \*4 (dismissing direct infringement where there was no assertion that “Defendant directs, controls, or has any other relationship” with the owner of the third-party app). Here, Headwater does not allege that Samsung controls or directs the Google servers. Headwater’s infringement allegations also fail for this independent reason.

#### **B. “secure Internet data connections”**

Headwater fails to put Samsung on notice of any “secure Internet data connections” in its products. It alleges that “communications links between the servers and clients” satisfy this limitation because “Samsung’s requirements specify that the accused connections be encrypted.”

Dkt. 42 at 8-9; *id.* at 2. The FAC fails to identify, however, any encryption “requirement” set by Samsung or any specific encryption protocol in either its FAC or its Opposition. *See* Dkt. 31-5 at 23-31; Dkt. 42 at 8-9. Its only reference to “encrypt[ion]” refers to *optional* encryption subject to how third party application developers design their applications. *See* Dkt. 31-5 at 30-31 (citing website that references exemplary application code stating: “Decrypt app data here if it is encrypted” (emphasis added)).

**C. “a secure interprocess communication service”**

Headwater fails to put Samsung on notice of any “secure interprocess communication service” in its products. Headwater alleges that “software in the accused client devices that interprets messages from servers and forward data in those messages to a software process or application” meets this limitation. Dkt. 42 at 9. Headwater further alleges that the Android API and Tizen API “provide” this limitation. These statements amount to no more than a high level functional description of client-server architecture. The FAC thus provides no plausible allegations of any “secure interprocess communication service” within Samsung’s products.

**III. HEADWATER FAILED TO ADEQUATELY PLEAD INFRINGEMENT OF THE ’733 PATENT.**

**A. “control-plane communications”**

The FAC does not allege that “Firebase messaging servers” provide “control plane communications.” Although Headwater amended the Complaint to cure the deficiencies, Headwater’s amendment does not address the deficiencies regarding the “Firebase messaging servers.” Headwater points to a screenshot in the FAC and asserts that the screenshot “illustrates control-plane communications from server (‘FCM backend’) to user devices (‘SDC on device’).” Dkt. 42 at 13. But, the screenshot at best illustrates how messages are communicated without identifying what, specifically, constitutes “control-plane” communications.

With respect to the other accused servers, Headwater asserts that the FAC “explains” that they “support control-plane communications’ with user devices *and* include ‘service control server links’ through which those communications occur.” Dkt. 42 at 13 (emphasis added). Not so. The FAC lumps the two limitations together and provides a single reason in support, namely that “they control, manage, and apply service policies to user devices to which they are connected.” Dkt. 31-4 at 13. Based on this alone, one cannot plausibly infer that the servers both support “control-plane communications” and do so through “service control server link element.” Headwater is also incorrect that the FAC “provides fair notice that the *identified message* for controlling user devices are ‘control-plane communications.’” Dkt. 42 at 14 (emphasis added). Tellingly, Headwater does not cite where such a message is identified.

**B. “service control device link agent” and a “service control server link element”**

The FAC does not allege that “Firebase messaging servers” include a “service control server link element,” a claim element that appears three times in claim 1. Dkt. 40 at 8-9. This should end the inquiry. Headwater now asserts that “service control server link elements” are simply “servers in the server/client architecture,” but such an allegation was not in the FAC and thus should not be considered. *See Energy Coal v. CITGO Petroleum Corp.*, 836 F.3d 457, 462 (5th Cir. 2016) (“The complaint may not be amended by the briefs in opposition to a motion to dismiss”) (internal quotations and citations omitted). Moreover, contrary to Headwater’s characterization (Dkt. 42 at 15), the error is not simply an omission of “magic words.” There is no context that fills the void, and Samsung is left to speculate how Firebase messaging servers—or any other server—would allegedly include a “service control server link element.”

Headwater’s argument concerning the “encryption key” fares no better. Headwater states that the FAC identifies “Samsung user devices as those having memory storing the encryption key

of the claims and that such keys are shared between client and server.” Dkt. 42 at 15. But the allegations Headwater cites simply parrot the claim language. *See* Dkt. 31-4 at 24, 29, 33. These “[t]hreadbare recitals” should be given no weight. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009).

#### **IV. HEADWATER FAILED TO ADEQUATELY PLEAD INFRINGEMENT OF THE ’192 PATENT**

##### **A. “secure message link”**

Headwater rests on circular logic with respect to this claim limitation. Its reply argues that the FAC asserts there is a “communications link” “between the servers and clients,” which is the alleged “secure message link.” But nowhere does the FAC explain *what* it contends to be the alleged link. In general, client devices can communicate with certain servers. Their mechanisms for doing so, however, are complex, being implemented in different networking layers, being established across different networking equipment in different scenarios, being potentially encrypted by different protocols. Merely identifying the endpoints, thus, does not suffice to put Samsung on notice of what is the alleged “secure message link” between these endpoints. The ’192 patent itself recognizes this nuance, given that its Figure 16 distinguishes between a “service control plane communication path” (shown with a dashed line) and a “service traffic plane communication path” (shown with a solid line). *See* Dkt. 31-3 at 31.

##### **B. “transport services stack”**

Headwater contends that “the communications software enabling the servers and clients in the Accused Instrumentalities to communicate one another” is the “transport services stack.” Dkt. 42 at 18. This statement begs the question: What is the alleged “communications software”? Servers and devices, in general, run software and can communicate. Despite claiming that there is “specific software” that is communications software, the FAC fails to identify what that software is or how it can be distinguished from other types of software. *See* Dkt. 31-6 at 59. The FAC thus fails to put Samsung on notice of what is accused.

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Respectfully submitted,

By: /s/ Shaun W. Hassett

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